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SUBJECT INDEX

The names of fungi and bacteria used in the Subject Index are kept in line with the International Codes of Botanical and Bacteriological Nomenclature and with current taxonomic opinion. Whenever the perfect state of a fungus is known and generally accepted the name applied to this state is used.

To facilitate entry into the index, a list of some commonly used synonyms and imperfect state names is given below in the left-hand column, with in the right-hand column the name used in the index.

| For references to | See under | For references to | See under |
|--|---|---|--|
| <i>Alternaria tenuis</i> | <i>Alternaria alternata</i> | <i>F. sulphureum</i> | <i>G. cyanogena</i> |
| <i>Armillaria metsutake</i> | <i>Tricholoma matsutake</i> | <i>Fusciadium effusum</i> | <i>Cercospora effusa</i> |
| <i>Armillariella mellea</i> | <i>Armillaria mellea</i> | <i>Ganoderma pseudoferreum</i> | <i>Ganoderma philippii</i> |
| <i>Ascochyta chrysanthemi</i> | <i>Didymella chrysanthemi</i> | <i>Gloeosporium album</i> | <i>Pezicula alba</i> |
| <i>A. imperfecta</i> | <i>Phoma medicaginis</i> | <i>G. ampelophagum</i> | <i>Elsinoë ampelina</i> |
| <i>A. pinodes</i> | <i>Mycosphaerella pinodes</i> | <i>G. musarum</i> | <i>Colletotrichum musae</i> |
| <i>Bipolaris sorokiniana</i> | <i>Cochliobolus sativus</i> | <i>G. perennans</i> | <i>Pezicula malicorticis</i> |
| <i>Boletus luteus</i> | <i>Swillus luteus</i> | <i>Helminthosporium atrovirens</i> | <i>Helminthosporium solani</i> |
| <i>Botryotinia fuckeliana</i> | <i>Sclerotinia fuckeliana</i> | <i>H. bromi</i> | <i>Pyrenophora bromi</i> |
| <i>Botrytis gladiolorum</i> | <i>S. draytonii</i> | <i>H. carbonum</i> | <i>Cochliobolus carbonum</i> |
| <i>B. squamosa</i> | <i>S. squamosa</i> | <i>H. dictyoides</i> | <i>Pyrenophora dictyoides</i> |
| <i>Brunchorstia pinea</i> | <i>Gremmeniella abietina</i> | <i>H. gramineum</i> | <i>P. graminea</i> |
| <i>Calonectria nivalis</i> | <i>Micronectriella nivalis</i> | <i>H. incurvatum</i> | <i>Drechslera incurvata</i> |
| <i>Cephalosporium</i> | <i>Acremonium</i> | <i>H. maydis</i> | <i>Cochliobolus heterostrophus</i> |
| <i>Cephalosporium acremonium</i> | <i>Acremonium strictum</i> | <i>H. nodulosum</i> | <i>C. nodulosus</i> |
| <i>Cephalosporium gregatum</i> | <i>Phialophora gregata</i> | <i>H. oryzae</i> | <i>C. miyabeanus</i> |
| <i>Cercospora arachidicola</i> | <i>Mycosphaerella arachidis</i> | <i>H. rostratum</i> | <i>Setosphaeria rostrata</i> |
| <i>C. cruenta</i> | <i>M. cruenta</i> | <i>H. sacchari</i> | <i>D. sacchari</i> |
| <i>C. personata</i> | <i>M. berkeleyi</i> | <i>H. sativum</i> | <i>Cochliobolus sativus</i> |
| <i>Cercospora herpotrichoides</i> | <i>Pseudocercospora herpotrichoides</i> | <i>H. setariae</i> | <i>C. setariae</i> |
| <i>Cladosporium effusum</i> | <i>Cercospora effusa</i> | <i>H. siccans</i> | <i>Drechslera siccans</i> |
| <i>Cladosporium fulvum</i> | <i>Fulvia fulva</i> | <i>H. sigmaeum</i> | <i>Magnaporthe salvinii</i> |
| <i>Clasterosporium carpophilum</i> | <i>Stigmina carpophila</i> | <i>H. sorokinianum</i> | <i>Cochliobolus sativus</i> |
| <i>Clitocybe tabescens</i> | <i>Armillaria tabescens</i> | <i>H. tetramera</i> | <i>Drechslera tetramera</i> |
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 Advances in virus research 25 5009
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 Atlas and manual of plant pathology 1060
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 Microbiology - 1978 2023
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 Plant breeding and genetics in horticulture 614
 Plant cell and tissue culture. Principles and applications 3082
 Plant disease. An advanced treatise, Vol. III 2024
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USA, ARS 1117

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Culture collection catalogue

American Type 4065

Centralbureau voor Schimmelcultures 2069

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 Belgium, Natn. Bot. Garden 1050
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 Cyprus, Minist. Agric. 2009
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 Malaysia, Rubber Res. Inst. Malaysia 4305
 Mauritius, Sugar Industry Res. Inst. 4754
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